

FIG. 1

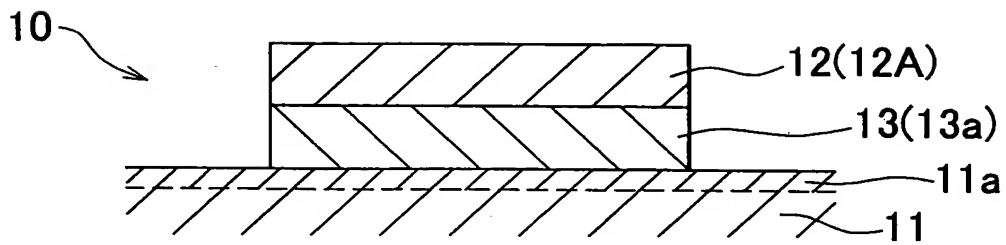


FIG. 2

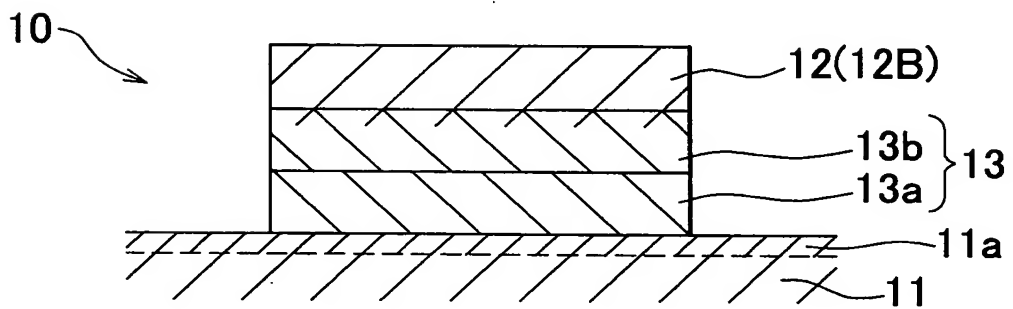


FIG. 3

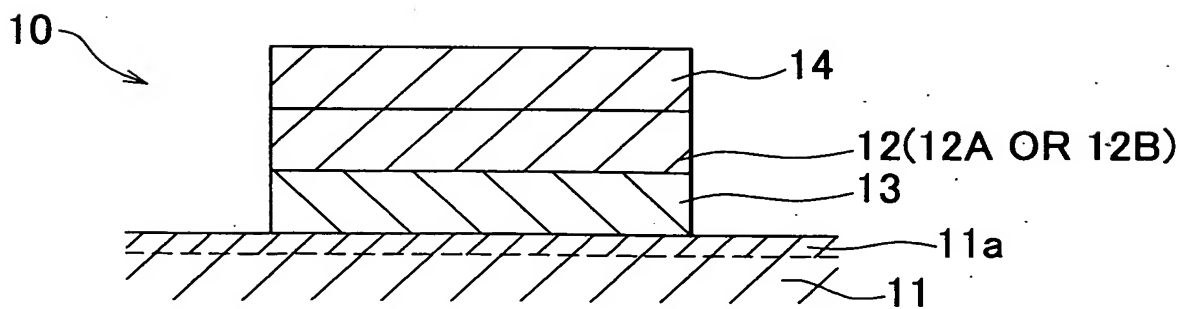
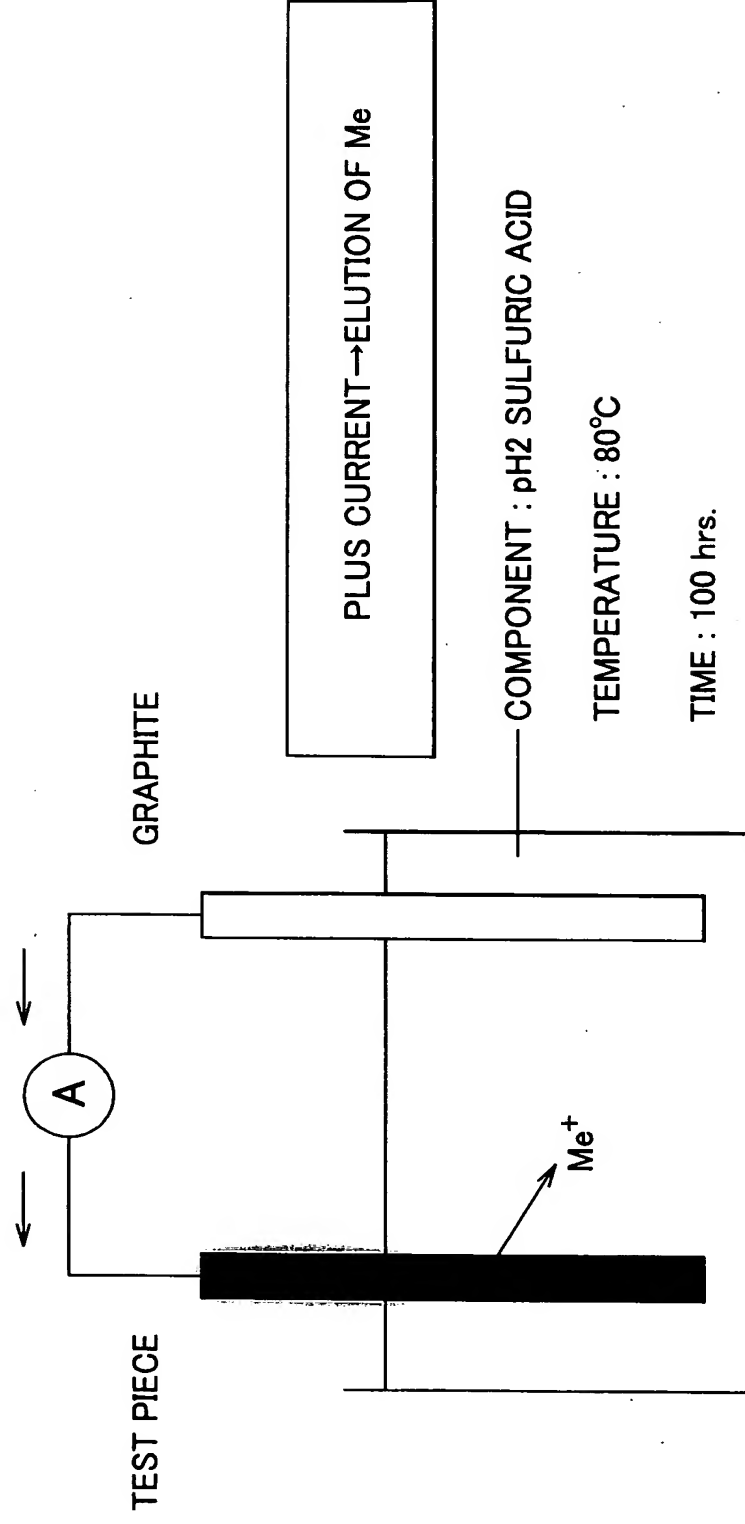
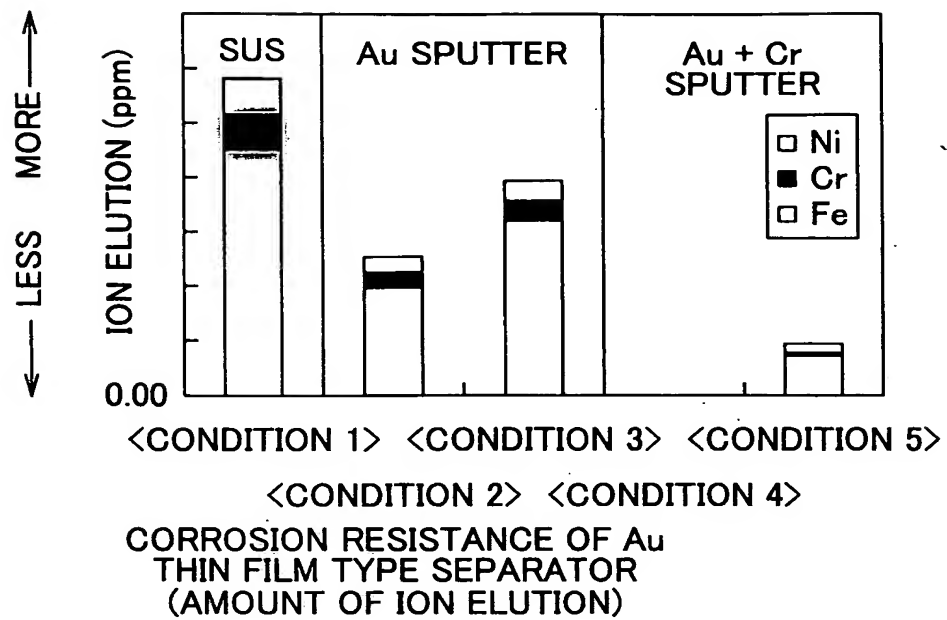


FIG. 4

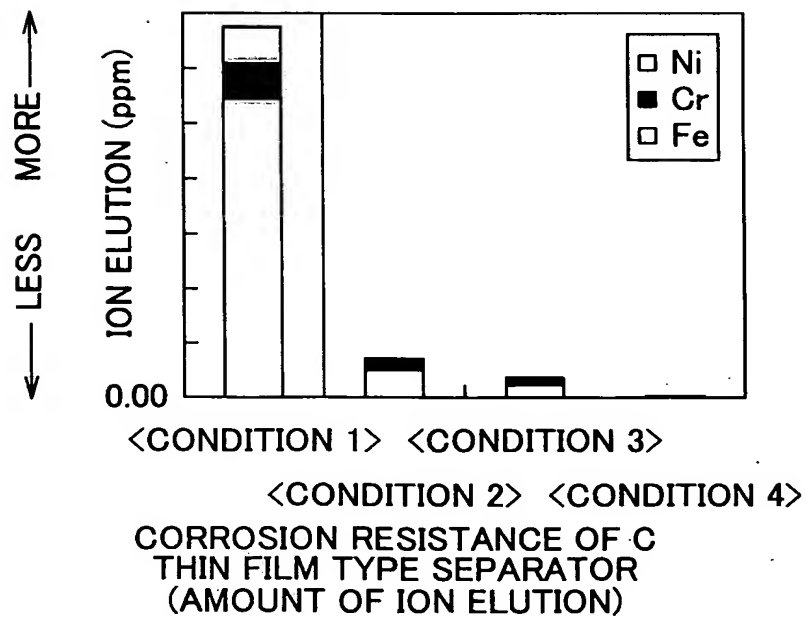


COUPLE CURRENT TEST METHOD

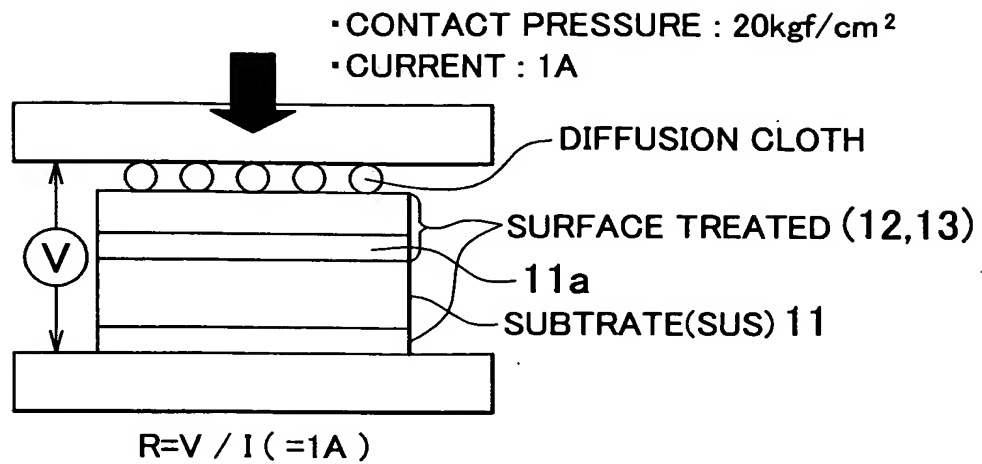
# FIG. 5



# FIG. 6

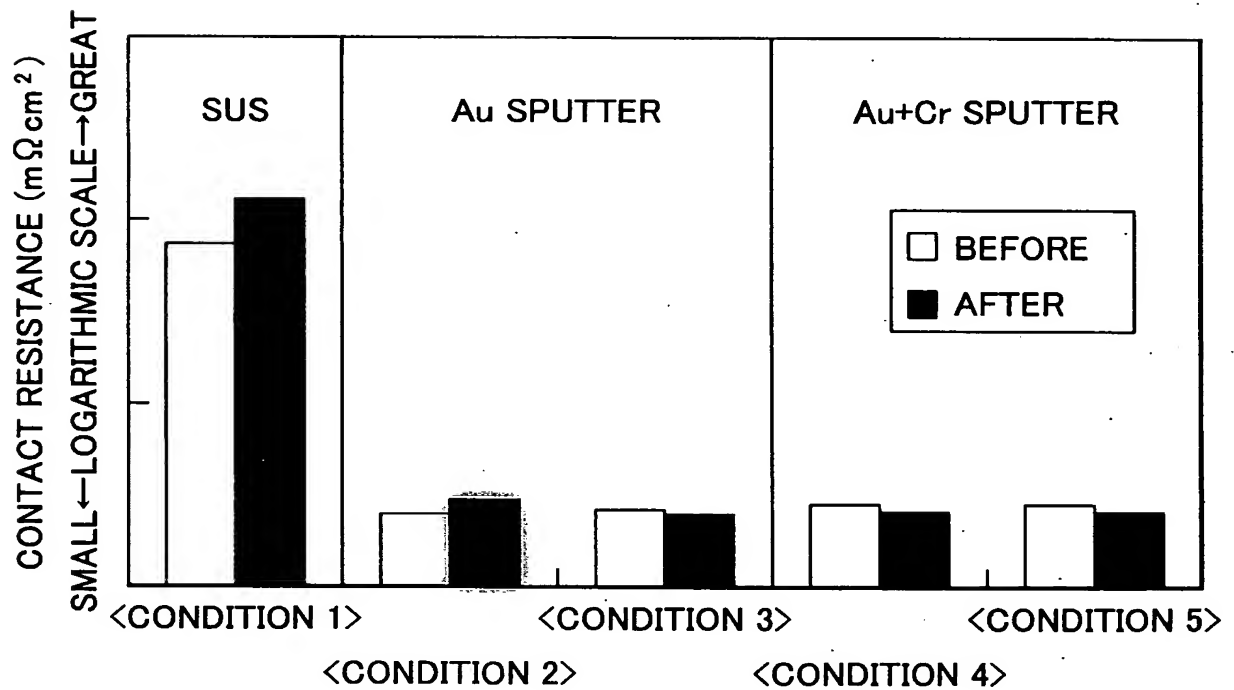


# FIG. 7



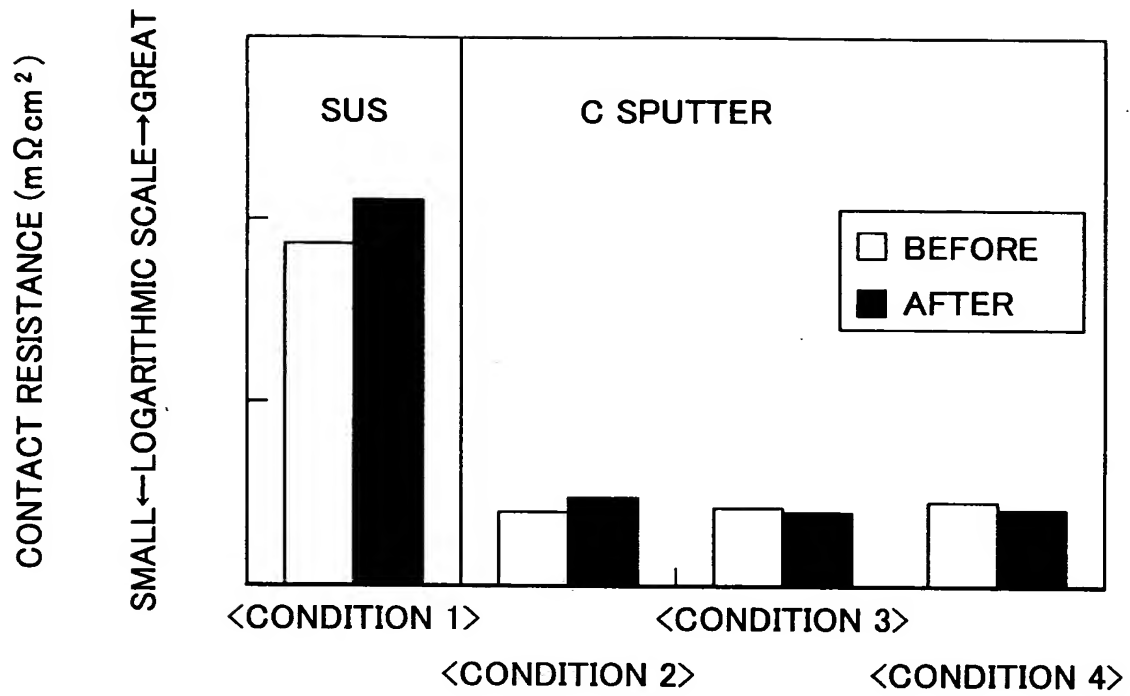
CONTACT RESISTANCE TEST METHOD

# FIG. 8



CONTACT RESISTANCE OF Au THIN FILM TYPE  
SEPARATOR BEFORE AND AFTER CORROSION TEST

# FIG. 9

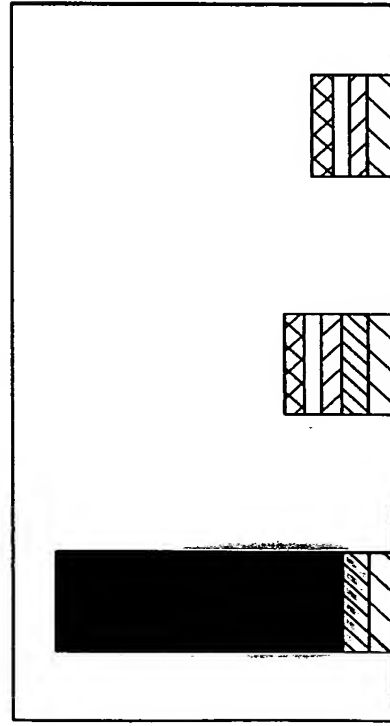


CONTACT RESISTANCE OF C THIN FILM TYPE  
SEPARATOR BEFORE AND AFTER CORROSION TEST

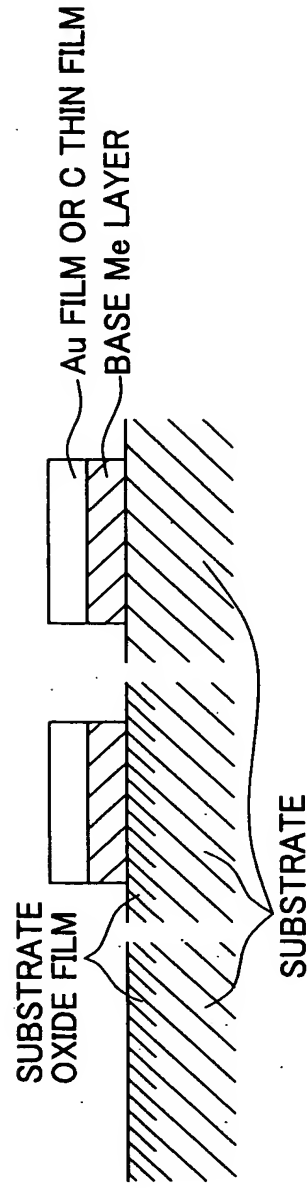
# FIG. 10

CONTACT RESISTANCE( $m\Omega cm^2$ )

<CONDITION 1> <CONDITION 4> <CONDITION 5>

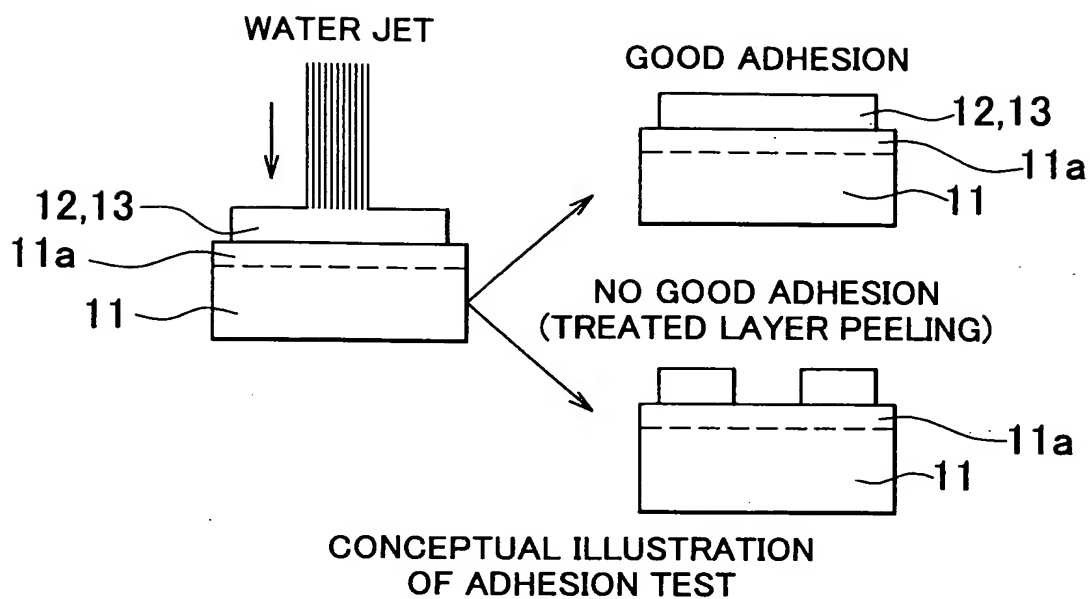


- : CONTACT RESISTANCE OF DIFFUSION CLOTH (CARBON CLOTH) AND SUBSTRATE OXIDE FILM
- ▨ : CONTACT RESISTANCE OF DIFFUSION CLOTH (CARBON CLOTH) AND Au FILM OR C THIN FILM
- ▧ : RESISTANCE OF Au FILM, C THIN FILM
- : RESISTANCE OF BASE FILM
- ▩ : RESISTANCE OF SUBSTRATE OXIDE FILM
- ▦ : RESISTANCE OF SUBSTRATE

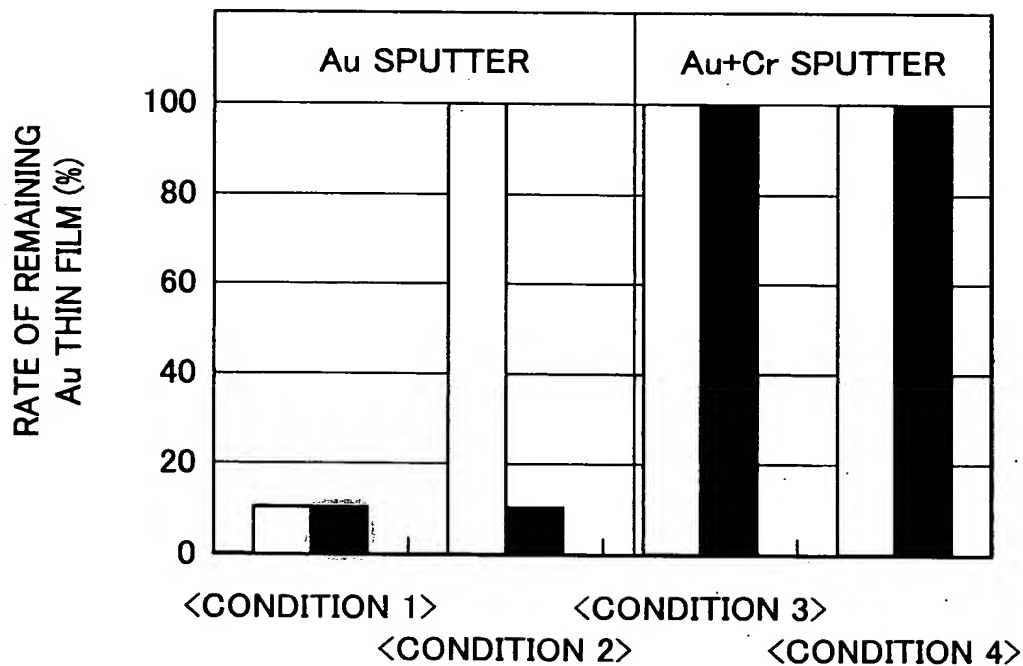


CONSTRUCTION OF SURFACE TREATMENT AND  
CONTACT RESISTANCE COMPONENTS (CONCEPTUAL)

# FIG. 11

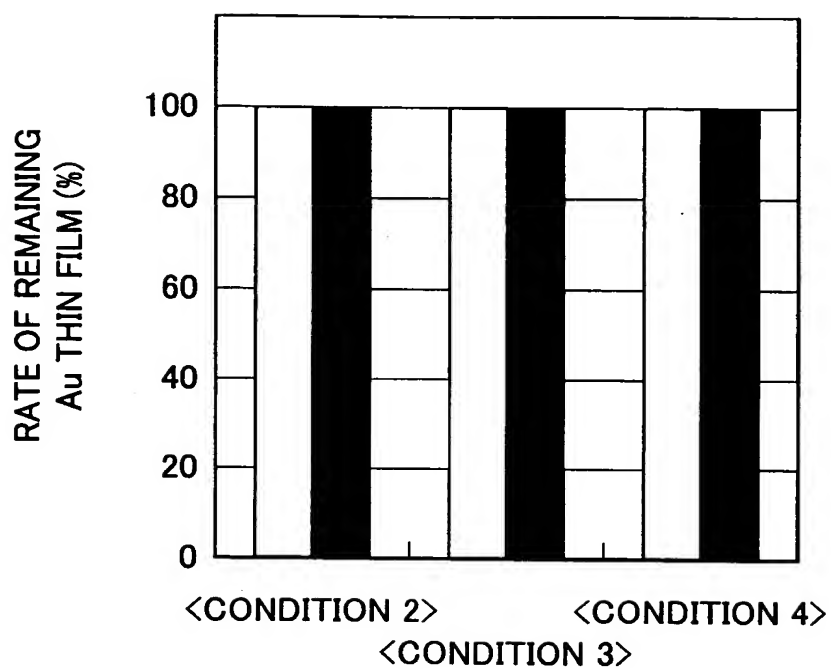


# FIG. 12



ADHESION OF Au THIN FILM TYPE SEPARATOR

# FIG. 13



ADHESION OF Au THIN FILM TYPE SEPARATION

FIG. 14A

FIG. 14C

FIG. 14B

FIG. 14D

VARIATION I

C	CARBON LAYER	C	VARIATION II		VARIATION III		VARIATION IV	
B	CARBON-Me OR MeC GRADIENT LAYER		C		C		C	
A	Me OR MeC LAYER		B		A		B	

METAL  
SEPARATOR

METAL  
SEPARATOR

METAL  
SEPARATOR

METAL  
SEPARATOR

FIG. 14E

FIG. 14G

FIG. 14F

FIG. 14H

VARIATION V

G F E D	CARBON LAYER	VARIATION VI		VARIATION VII		VARIATION VIII	
	CARBON-Me(A) OR Me(A)C GRADIENT LAYER	G		G		F	
	Me(A) OR Me(A)C-Me(B) OR Me(B)C GRADIENT LAYER	F		E		E	
	Me(B) OR Me(B)C LAYER	E		D		E	

METAL  
SEPARATOR

METAL  
SEPARATOR

METAL  
SEPARATOR

METAL  
SEPARATOR

FIG. 14I

FIG. 14K

FIG. 14J

FIG. 14L

VARIATION IX

J  I  H	CARBON LAYER+Me OR MeC LAYER  CARBON+Me OR MeC-Me OR MeC GRADIENT LAYER  Me OR MeC LAYER	VARIATION X		VARIATION X I		VARIATION X II		METAL SEPARATOR	METAL SEPARATOR	METAL SEPARATOR
		J		J		J				
		I		H		I				